VERIZON MASSACHUSETTS

APPENDIX A

October 27, 2000

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Note: **BOLD** indicates Critical Measure

Table A-1-1: Resale - Mode of Entry Weights

PO	Pre-Ordering	Weight
1-01	**Customer Service Record**	**15**
1-02	**Due Date Availability**	**5**
1-03	**Address Validation**	**5**
1-04	**Product and Service Availability**	**5**
1-05	**Telephone Number Availability and Reservation**	**5**
1-06	**Facility Availability (Loop Qualification)**	**5**
2-02	**OSS System Availability – Prime**	**20**
3-02	% Answered within 30 Seconds – Ordering	10
3-04	% Answered within 30 Seconds – Repair	10
OR	**Ordering**	
1-02	% On Time LSRC - Flow Through - POTS	40
1-04	% OT LSRC <10 Lines (Elec.- No Flow Through) – POTS	10
1-04	% OT LSRC <10 Lines (Elec.- No Flow Through) – Specials	5
1-06	% On Time LSRC >= 10 Lines (Electronic) – POTS	10
1-06	% On Time LSRC >= 10 Lines (Electronic) – Specials	5
2-02	% On Time LSR Reject - Flow Through – POTS	30
2-04	% OT LSR Reject<10 Lines (Elec.-No Flow Through)-POTS	30
2-04	% OT LSR Reject<10 Lines (Elec.-No Flow Through)-Specials	5
2-06	% On Time LSR Reject >=10 Lines (Electronic) – POTS	10
2-06	% On Time LSR Reject >=10 Lines (Electronic) – Specials	5
4-09	% SOP to Bill Completion Notice Sent Within 3 Business Days	30
5-03	% Flow Through Achieved	20
6-03	% Accuracy – LSRC	10
PR	**Provisioning**	
3-08	% Completed w/in 5 Days (1-5 lines - No Dispatch) – POTS	10
3-09	% Completed w/n 5 Days (1-5 lines - Dispatch) – POTS	5
4-01	**% Missed Appointment - BA - Total – Specials**	**10**
4-02	Average Delay Days - Total – POTS	10
4-02	Average Delay Days - Total – Specials	10
4-04	**% Missed Appointment - BA - Dispatch – POTS**	**10**
4-05	**% Missed Appointment- BA - No Dispatch - POTS**	**20**
5-01	% Missed Appointment - Facilities – POTS	10
5-01	% Missed Appointment - Facilities – Specials	10
5-02	% Orders Held for Facilities > 15 days – POTS	5
5-02	% Orders Held for Facilities > 15 days – Specials	5
6-01	% Installation Troubles within 30 days – POTS	15
6-01	% Installation Troubles within 30 days – Specials	15
MR	**Maintenance & Repair**	
1-01	Average Response Time - Create Trouble	5
1-03	Average Response Time - Modify Trouble	5
1-04	Average Response Time - Request Cancellation of Trouble	5
1-06	Average Response Time - Test Trouble (POTS only)	5
2-01	Network Trouble Report Rate – Specials	10
2-02	Network Trouble Report Rate - Loop (POTS)	10
3-01	% Missed Repair Appointments – Loop	20
3-02	% Missed Repair Appointments - Central Office	5
4-01	**Mean Time to Repair – Specials**	**20**
4-02	**Mean Time to Repair - Loop Trouble**	**15**
4-03	**Mean Time to Repair - CO Trouble**	**5**
4-08	**% Out of Service > 24 Hours – POTS**	**20**
4-08	% Out of Service > 24 Hours – Specials	10
5-01	**% Repeat Reports w/in 30 days - POTS**	**15**
5-01	**% Repeat Reports w/in 30 days - Specials**	**15**
BI	**Billing**	
1-01	% DUF in 4 Business Days	10
		600

Table A-1-2: Unbundled Network Elements - Mode of Entry Weights

PO	Pre-Ordering	Weight
1-01	**Customer Service Record**	**15**
1-02	**Due Date Availability**	**5**
1-03	**Address Validation**	**5**
1-04	**Product and Service Availability**	**5**
1-05	**Telephone Number Availability and Reservation**	**5**
1-06	**Facility Availability (Loop Qualification)**	**5**
2-02	**OSS Interface Availability – Prime**	**20**
3-02	% Answered within 30 Seconds – Ordering	10
3-04	% Answered within 30 Seconds – Repair	10
OR	**Ordering**	
1-02	% On Time LSRC - Flow Through - POTS	40
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through)-POTS	10
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through)-Specials	5
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through)-Complex	0
1-06	% On Time LSRC >=10 Lines (Electronic) – POTS	10
1-06	% On Time LSRC >=10 Lines (Electronic) – Specials	5
1-06	% On Time LSRC >=10 Lines (Electronic) – Complex	0
2-02	% On Time LSR Reject - Flow Through – POTS	30
2-04	% OT LSR Reject<10 lines (Elec.-No Flow Through)-POTS	30
2-04	% OT LSR Reject<10 lines (Elec.-No Flow Through)-Specials	5
2-04	% OT LSR Reject<10 lines (Elec.-No Flow Through)-Complex	0
2-06	% On Time LSR Reject >= 10 Lines (Electronic) – POTS	10
2-06	% On Time LSR Reject >= 10 Lines (Electronic) – Specials	5
2-06	% On Time LSR Reject >= 10 Lines (Electronic) – Complex	0
4-09	**% SOP to Bill Completion Sent Within 3 Business Days**	**30**
5-03	**% Flow Through – Achieved**	**20**
6-03	**% OT Accuracy LSRC**	**10**
PR	**Provisioning**	
3-08	% Completed w/in 5 Days (1-5 lines-No Dispatch)-UNE-P/Other	5
3-09	% Completed w/in 5 Days (1-5 lines-Dispatch)-UNE-P/Other	10
4-01	**% Missed Appointment - BA – Total – Specials**	**10**
4-01	**% Missed Appointment - BA – Total – EEL**	**10**
4-01	% Missed Appointment - BA - Total – IOF	10
4-02	Average Delay Days - Total – POTS	10
4-02	Average Delay Days - Total – Specials	10
4-02	Average Delay Days - Total – Complex	10
4-04	% Missed Appointment - BA – Dispatch – Platform	10
4-04	**% Missed Appointment - BA – Dispatch - New Loop**	**10**
4-04	**% Missed Appointment - BA – Dispatch** – Complex	**10**
4-05	**% Missed Appointment- BA - No Dispatch - Platform**	**20**
4-05	**% Missed Appointment- BA - No Dispatch - Complex**	**10**
4-06	**% On Time Performance - Hot Cut**	**20**
5-01	% Missed Appointment - Facilities – POTS	10
5-01	% Missed Appointment - Facilities – Specials	10
5-02	% Orders Held for Facilities > 15 days – POTS	5
5-02	% Orders Held for Facilities > 15 days – Specials	5
6-01	% Installation Troubles within 30 days - POTS Other	15
6-01	% Installation Troubles within 30 days – Specials	15
6-02	**% Installation Troubles within 7 days – Hot Cut Loops**	**15**

MR	Maintenance & Repair	
1-01	Average Response Time - Create Trouble	5
1-03	Average Response Time - Modify Trouble	5
1-04	Average Response Time - Request Cancellation of Trouble	5
1-06	Average Response Time - Test Trouble (POTS only)	5
2-01	Network Trouble Report Rate – Specials	10
2-02	Network Trouble Report Rate - Loop (POTS)	10
3-01	% Missed Repair Appointments – Loop	20
3-02	% Missed Repair Appointments - Central Office	5
4-01	**Mean Time to Repair – Specials**	**20**
4-02	**Mean Time to Repair - Loop Trouble**	**15**
4-03	**Mean Time to Repair - CO Trouble**	**5**
4-08	**% Out of Service > 24 Hours – POTS**	**20**
4-08	% Out of Service > 24 Hours – Specials	10
5-01	**% Repeat Reports w/in 30 days - POTS**	**15**
5-01	**% Repeat Reports w/in 30 days - Specials**	**15**
BI	**Billing**	
1-01	% DUF in 4 Business Days	10
		695

Table A-1-3: Interconnection - Mode of Entry Weights

OR-	**Ordering**	Weight
1-12	% On Time Firm Order Confirmations	15
1-13	% On Time Design Layout Record	10
2-12	% On Time Trunk ASR Reject	10
PR-	**Provisioning**	
4-01	**% Missed Appointment - BA – Total**	**20**
4-02	Average Delay Days – Total	10
4-07	**% On Time Performance - LPN only**	**20**
5-01	% Missed Appointment – Facilities	10
5-02	% Orders Held for Facilities > 15 Days	10
6-01	**% Installation Troubles w/in 30 Days**	**15**
MR-	**Maintenance & Repair**	
4-01	**Mean Time to Repair – Total**	**20**
5-01	% Repeat Reports w/in 30 Days	10
NP-	**Network Performance**	
1-03	**# of Final Trunk Groups Blocked 2 Months**	10
1-04	**# of Final Trunk Groups Blocked 3 Months**	20
		180

Table A-1-4: Collocation - Mode of Entry Weights

NP-	Network Performance	Weight
2-01	% OT Response to Request for Physical Collocation	10
2-02	% OT Response to Request for Virtual Collocation	10
2-05	**% On Time – Physical Location**	**20**
2-06	**% On Time – Virtual Location**	**20**
2-07	**Average Delay Days – Physical**	**20**
2-08	**Average Delay Days – Virtual**	**20**
		100

2. **Mode of Entry: Dollars At Risk – $41,200,000**

	Resale	UNE	Collocation	Trunks
Monthly	$515,000	$2,060,000	$118,391	$739,943
Annual	$6,180,000	$24,720,000	$1,420,690	$8,879,310

3. **Minimum and Maximum Bill Credit Tables:**

Table A-3-1: Resale

Table A-3-2: Unbundled Network Elements

Table A-3-3: Interconnection Trunks

Table A-3-4: Collocation

Table A-3-1: Resale

- Maximum of $ 6,180,000 per year
- Maximum Credit Performance Score "X" = -0.670
- Minimum threshold = -0.1908
- Mid-point between minimum and maximum = -0.4304

Score Range		Monthly Dollars:	
<	And ≥		
	-0.1908	$0	
-0.1908	-0.2160	$103,000	
-0.2160	-0.2412	$124,684	
-0.2412	-0.2664	$146,368	
-0.2664	-0.2917	$168,053	
-0.2917	-0.1369	$189,737	
-0.1369	-0.3421	$211,421	
-0.3421	-0.3673	$233,105	
-0.3673	-0.3926	$254,789	
-0.3926	-0.4178	$276,474	
-0.4178	-0.4430	$298,158	
-0.4430	-0.4682	$319,842	
-0.4682	-0.4934	$341,526	
-0.4934	-0.5187	$363,211	
-0.5187	-0.5439	$384,895	
-0.5439	-0.5991	$406,579	
-0.5991	–0.5973	$428,263	
–0.5973	-0.6196	$449,947	
-0.6196	-0.6448	$471,632	
-0.6448	-0.6700	$493,316	
-0.6700		$515,000	

Table A-3-2: Unbundled Network Elements

- Maximum of $ 24,720,000 per year
- Maximum Credit Performance Score "X" = -0.670
- Minimum threshold = -0.1904
- Mid-point between minimum and maximum = -0.4302

Score Range		Monthly Dollars:	
<	And ≥		
	-0.1904	$0	
-0.1904	-0.2157	$412,000	
-0.2157	-0.2409	$498,737	
-0.2409	-0.2662	$585,474	
-0.2662	-0.2914	$672,211	
-0.2914	-0.3166	$758,947	
-0.3166	-0.3419	$845,684	
-0.3419	-0.3671	$932,421	
-0.3671	-0.3924	$1,019,158	
-0.3924	-0.4176	$1,105,895	
-0.4176	-0.4428	$1,192,632	
-0.4428	-0.4681	$1,279,368	
-0.4681	-0.4933	$1,366,105	
-0.4933	-0.5186	$1,452,842	
-0.5186	-0.5438	$1,539,579	
-0.5438	-0.5690	$1,626,316	
-0.5690	-0.5943	$1,713,053	
-0.5943	-0.6195	$1,799,789	
-0.6195	-0.6448	$1,886,526	
-0.6448	-0.6700	$1,973,263	
-0.6700		$2,060,000	

Table A-3-3: Interconnection Trunks

- Maximum of $ 8,879,310 per year
- Maximum Credit Performance Score "X" = -1.000
- Minimum threshold = -0.3014
- Mid-point between minimum and maximum = -0.6507

Score Range		Monthly Dollars:	
<	And ≥		
	-0.3014	$0	
-0.3014	-0.3551	$147,989	
-0.3551	-0.4088	$193,523	
-0.4088	-0.4626	$239,058	
-0.4626	-0.5163	$284,593	
-0.5163	-0.5701	$330,128	
-0.5701	-0.6238	$375,663	
-0.6238	-0.6776	$421,198	
-0.6776	-0.7313	$466,733	
-0.7313	-0.7850	$512,268	
-0.7850	-0.8388	$557,803	
-0.8388	-0.8925	$603,338	
-0.8925	-0.9463	$648,873	
-0.9463	-1.0000	$694,408	
-1.0000		$739,943	

Table A-3-4: Collocation

- Maximum of $ 1,420,690 per year
- Maximum Credit Performance Score "X" = -1.200
- Minimum threshold = 0
- Mid-point between minimum and maximum = -0.6

Score Range		Monthly Dollars:	
<	And ≥		
	0	$0	
0.00000	-0.10	$23,678	
-0.10	-0.20	$31,571	
-0.20	-0.30	$39,464	
-0.30	-0.40	$47,356	
-0.40	-0.50	$55,249	
-0.50	-0.60	$63,142	
-0.60	-0.70	$71,034	
-0.70	-0.80	$78,927	
-0.80	-0.90	$86,820	
-0.90	-1.00	$94,713	
-1.00	-1.10	$102,605	
-1.10	-1.20	$110,498	
-1.20		$118,391	

APPENDIX B

Appendix B CRITICAL MEASURES			Monthly $ At Risk				
		Description	Resale	UNE	Collocation	Trunks	TOTAL
1		**Response Time OSS Interface**	**$82,873**	**$195,345**			**$278,218**
	PO-1-01	Customer Service Record	$31,078	$73,254			
	PO-1-02	Due Date Availability	$10,360	$24,418			
	PO-1-03	Address Validation	$10,360	$24,418			
	PO-1-04	Product & Service Availability	$10,360	$24,418			
	PO-1-05	TN Reservation	$10,360	$24,418			
	PO-1-06	Facility Availability (Loop	$10,360	$24,418			
2	PO-2-02	**OSS Interface Availability (Prime Time)**	**$82,873**	**$195,345**			**$278,218**
3		**Ordering Performance**		**$195,345**			**$195,345**
	OR-1-02	% On Time LSRC - Flow Through (POTS)		$48,836			
	OR-1-04	% On Time LSRC <10 lines (No Flow-Through) (POTS)		$12,307			
	OR-1-06	% On Time LSRC >=10 lines (No Flow-Through) (POTS)		$12,307			
	OR-2-02	% On Time Reject - Flow Through (POTS)		$36,725			
	OR-2-04	% On Time Reject <10 lines (No Flow-Through) (POTS)		$36,725			
	OR-2-06	% On Time Reject >=10 lines (No Flow-Through) (POTS)		$12,307			
	OR-4-09	% SOP to Bill Completion Sent Within 3 Business Days		$36,725			
4a	PR-4-01	**% Missed Appointment - BA - Total – EEL**		**$97,672**			**$97,672**
4b		**% Missed Appointments**	**$82,873**	**$97,672**		**$236,782**	$417,327
	PR-4-01	Total – Specials	$20,718	$48,836			
	PR-4-01	Total – Trunks					
	PR-4-04	Dispatch - POTS	$20,718				
	PR-4-04	Dispatch - Loop – New		$48,836			
	PR-4-05	No Dispatch – POTS	$41,437				
5	PR-4-05	**% Missed Appointment - BA - No Dispatch - Platform**		**$195,345**			$195,345
6		**Hot Cut Loop Performance** [1]		**$390,690**			**$390,690**
	PR-4-06	% On Time – Hot Cut Loop					
	PR-6-01	% Installation Troubles within 7					
7	PR-4-07	**% On Time Performance - UNE LNP**				**$236,782**	$236,782
8		**% Repeat Reports within 30 Days**	**$82,873**	**$195,345**			$278,218
	MR-5-01	POTS	$41,437	$97,672			
	MR-5-01	Specials	$41,437	$97,672			
9		**Mean Time To Repair**	**$82,873**	**$195,345**		**$236,782**	$515,000
	MR-4-01	Total (Specials/Trunks)	$27,624	$65,115		$236,782	
	MR-4-02	Dispatch	$20,718	$48,837			
	MR-4-03	No Dispatch	$6,906	$16,278			
	MR-4-08	% Out of Service > 24 Hours	$27,624	$65,115			
10		**% Final Trunks Groups Blocking**				**$236,782**	$236,782
	NP-1-03	Blocked 2 Months				$78,926	
	NP-1-04	Blocked 3 Months				$157,854	
11		**Collocation**			**$118,392**		**$118,392**
	NP-2-5\6	% Completed on Time – Physical			$59,196		
	NP-2-7\8	Average Delay Days – Physical			$59,196		
12		**xDSL Performance**		**$195,345**			$195,345
	PO-8-01	Avg. Response Time - Manual		$24,418			
	PO-8-02	Avg. Response Time -		$24,418			
	PR-4-14-18	% Completed on Time		$122,091			
	PR-6-01	% Installation Troubles - xDSL		$24,418			
		Total Dollars At Risk – Monthly	**$414,368**	**$1,953,448**	**$118,391**	**$947,126**	$3,433,333
		Total Dollars At Risk – Annual	**$4,972,414**	**$23,441,379**	**$1,420,690**	**$11,365,517**	$41,200,000

(1) OSS $ allocated to Resale and UNE Lines in Service

[1] If either sub-metric performance standard is missed, the critical measure is considered missed.

APPENDIX C

Performance Scores for Measures with Absolute Standards:

Metric #'s	Measure	0	-1	-2
PO-1 and MR-1 [1]	OSS Response Time Measures	≤ 4 second difference	> 4 and ≤ 6 second difference	> 6 second difference
PO-2-02	OSS System Availability – Prime	≥ 99.5%	≥ 98 and < 99.5%	< 98%
See Table [2]	Metrics with 95% standards	≥ 95%	≥ 90 and < 95%	< 90%
PO-3	% Answered within 30 Seconds – Ordering & Repair	≥ 80%	≥ 75 and < 80%	< 75%
NP-2-08 NP-2-09	Collocation – Average Delay Days	≤ 6 Days	> 6 and ≤ 15 Days	> 15 Days
NP-1-03 NP-1-04	# of Final Trunk Groups Blocked for 2 and 3 Months	Final Interconnection Trunks meeting or exceeding blocking standard for one month	Any individual Final Interconnection Trunk group exceeding blocking standard for 2 months in a row	Any individual Final Interconnection Trunk group exceeding blocking standard for 3 months in a row
PR-6-02	% Installation Troubles reported within 7 Days – Hot Cut loop	≤ 2%	> 2 and ≤ 3%	> 3%

Example: If Verizon-MA were to perform at 97.0% for PO-2-02- OSS System Availability – Prime, in a month, then the performance score would be –2 for that measure.

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[1] Includes PO-1-01, PO-1-02, PO-1-03, PO-1-04, PO-1-05, PO-1-06, MR-1-01, MR-1-03, MR-1-04 and MR-1-06

[2] The Metrics with a 95% Standard appear on the following page.

Table C-1-1: Performance Metrics with 95% Performance Standard:

OR	**Ordering**
1-02	% On Time LSRC - Flow Through - POTS – 2hrs
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through) - POTS
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through) - Specials
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through) - Complex
1-06	% On Time LSRC >=10 Lines (Electronic) – POTS
1-06	% On Time LSRC >=10 Lines (Electronic) – Specials
1-06	% On Time LSRC >=10 Lines (Electronic) – Complex
1-12	% On Time Firm Order Confirmations
1-13	% On Time Design Layout Record
2-02	% On Time LSR Reject - Flow Through – POTS
2-04	% OT LSR Rej.<10 lines (Elec.-No Flow Through) - POTS
2-04	% OT LSR Rej.<10 lines (Elec.-No Flow Through) - Specials
2-04	% OT LSR Rej.<10 lines (Elec.-No Flow Through) - Complex
2-06	% On Time LSR Reject >= 10 Lines (Electronic) - POTS
2-06	% On Time LSR Reject >= 10 Lines (Electronic) - Specials
2-06	% On Time LSR Reject >= 10 Lines (Electronic) - Complex
2-12	% On Time Trunk ASR Reject
4-09	% SOP to Bill Completion Notice Sent Within 3 Business Days
5-03	% Flow Through Achieved
6-03	% OT Accuracy LSRC
PR	**Provisioning**
4-06	% On Time Performance - Hot Cut
4-07	% On Time Performance - LNP only
BI	**Billing**
1-01	% DUF in 4 Business Days
NP	**Network Performance**
2-01	% OT Response to Request for Physical Collocation
2-02	% OT Response to Request for Virtual Collocation
2-05	% On Time - Physical Location
2-06	% On Time - Virtual Location

Table C-1-2: Allowable Misses for Small Sample Sizes for Counted Variable Performance Measures with Absolute Standards

A. Allowable Misses:

- If less than 20 items, find volume of items measured in Sample Size Column.
- If the number of misses falls under the Zero weight column, then the performance measure is given a weight of zero and not counted towards the total performance score.
- If the number of misses falls in the "0" column, a performance score of 0 is given the performance metric.
- If the number of misses falls into the "-1" column, the performance score for the metric I –1.
- If the number of misses falls into the –2 column, the performance score is –2.
- "NA" is not applicable

95% Standard:

Sample Size	Zero Weight	0	-1	-2
1	1	0	NA	NA
2	1	0	2	NA
3	1	0	2	3
4	1	0	2	3+
5	1	0	2	3+
6	1	0	2	3+
7	1	0	2	3+
8	1	0	2	3+
9	1	0	2	3+
10	1	0	2	3+
11	1	0	2	3+
12	1	0	2	3+
13	1	0	2	3+
14	1	0	2	3+
15	1	0	2	3+
16	1	0	2	3+
17	1	0	2	3+
18	1	0	2	3+
19	1	0	2	3+
20	NA	≤ 1	2	3+

B. CLEC Exception Process

Each month each CLEC will have the right to challenge the allowable misses or exclusions that Verizon-MA may exercise pursuant to the small sample size table for

performance measures with absolute standards. If a CLEC exercises this right, it must file a petition with the Department demonstrating that the exclusion will have a significant impact on the operations of the CLEC's business and that Verizon-MA should not be allowed to exclude the event pursuant to the above table. Verizon-MA will have a right to respond to any such challenge by the CLEC. The Timeline for CLEC Exceptions will be the same as the Timeline for Verizon-MA Exceptions under the small sample size section in Appendix D. If a CLEC's Exception Petition is granted, the appropriate bill credits will be reflected on the CLEC's bill as soon as is practical.

APPENDIX D

STATISTICAL ANALYSIS

A. Statistical Methodologies:

The Performance Assurance Plan uses statistical methodologies as one means to determine if "parity" exists, or if the wholesale service performance for CLECs is equivalent to the performance for Verizon-MA. For performance measures where "parity" is the standard and sufficient sample size exists, Verizon-MA will use the "modified Z statistic" proposed by a number of CLECs who are members of the Local Competitors User Group ("LCUG"). A Z or t score of below -1.645 provides a 95% confidence level that the variables are different, or that they come from different processes. The specific formulas are as follows:

Measured Variables:	Counted Variables: [1]
$t = \frac{\bar{X}_{CLEC} - \bar{X}_V}{\sqrt{s_V^2 \left(\frac{1}{n_{CLEC}} + \frac{1}{n_V}\right)}}$	$Z = \frac{P_{CLEC} - P_V}{\sqrt{P_V (1 - P_V)\left(\frac{1}{n_{CLEC}} + \frac{1}{n_V}\right)}}$

Definitions:

Measured Variables are metrics of means or averages, such as mean time to repair, or average interval.

Counted Variables are metrics of proportions, such as percent measures.

$\bar{X}$ is defined as the average performance or mean of the sample.

S is defined as the standard deviation.

n is defined as the sample size.

p is defined as the proportion, for percentages 90% translates to a 0.90 proportion.

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[1] For metrics where higher numbers indicate better performance, this equation is reversed. These include: % Completed w/in 5 days – (1-5 lines – No Dispatch and % Completed w/in 5 days (1-5 lines – Dispatch)

B. Sample Size Requirements:

The standard Z or t statistic will be used for measures where "parity" is the standard, unless there is insufficient sample size. For measured variables, the minimum sample size is 30. For counted variables, the result of np(1-p) must be greater than or equal to 5. When the sample size requirement is not met, Verizon-MA will do the following:

1. If the performance for the CLEC is better than Verizon-MA's performance, no statistical analysis is required.
2. If the performance is worse for the CLEC than Verizon-MA, Verizon-MA will use the Permutation Test.
3. If the permutation test shows an "out of parity" condition, Verizon-MA will perform a root cause analysis to determine cause. If the cause is the result of "clustering" within the data, Verizon-MA will provide documentation demonstrating that clustering caused the out of parity condition.
4. The nature of the variables used in the performance measures is such that they do not meet the requirements 100% of the time for any statistical testing including the requirement that individual data points must be independent. The primary example of such non-independence is a cable failure. If a particular CLEC has fewer than 30 troubles and all are within the same cable failure with long duration, the performance will appear out of parity due to this clustering. However, for all troubles, including Verizon-MA troubles, within that individual event, the trouble duration is identical. Another example of clustering is if a CLEC has a small number of orders in a single location, with a facility problem. If this facility problem exists for all customers served by that cable and is longer than the average facility problem, the orders are not independent and clustering

occurs. Finally, if root cause shows that the difference in performance is the result of CLEC behavior, Verizon-MA will identify such behavior and work with the respective CLEC on corrective action.

C. Verizon Exceptions Process:

1. A key frailty of using statistics to evaluate parity is that a key assumption about the data, necessary to use statistics, is faulty. As noted, one such assumption is that the data is independent. Events included in the performance measures of provisioning and maintenance of telecommunication services are not independent. The lack of independence is referred to as "clustering" of data. Clustering occurs when individual items (orders, troubles, *etc.*) are clustered together as one single event. This being the case, Verizon-MA will have the right to file an exception to the performance scores in the Performance Assurance Plan if the following events occur:

a. **Event Driven Clustering: Cable Failure:** If a significant proportion (more than 30%) of a CLEC's troubles are in a single cable failure, Verizon-MA may provide data demonstrating that all troubles within that failure, including Verizon-MA troubles were resolved in an equivalent manner. Verizon-MA also will provide the repair performance data with that cable failure performance excluded from the overall performance for both the CLEC and Verizon-MA. The remaining troubles will be compared according to normal statistical methodologies.

b. **Location Driven Clustering: Facility Problems:** If a significant proportion (more than 30%) of a CLEC's missed installation orders and resulting delay days were due to an individual location with a significant

facility problem, Verizon-MA will provide the data demonstrating that the orders were "clustered" in a single facility shortfall. Then, Verizon-MA will provide the provisioning performance with that data excluded. Additional location driven clustering may be demonstrated by disaggregating performance into smaller geographic areas.

c. **Time Driven Clustering: Single Day Events:** If significant proportion (more than 30%) of CLEC activity, provisioning or maintenance, occur on a single day within a month, and that day represents an unusual amount of activity in a single day, Verizon-MA will provide the data demonstrating that the activity is on that day. Verizon-MA will compare that single day's performance for the CLEC to Verizon-MA's own performance. Then, Verizon will provide data with that day excluded from overall performance to demonstrate "parity."

2. Documentation:

Verizon-MA will provide all details, ensuring protection of customer proprietary information, to the CLEC and Department. Details include, individual trouble reports, and orders with analysis of Verizon-MA and CLEC performance. For cable failures, Verizon-MA will provide appropriate documentation detailing all other troubles associated with that cable failure.

3. Timeline for Exceptions Process:

The following is an example illustrating the timeline for the Exception Process.

Action	Date
January Performance Reports	February 25th
Verizon Files Exceptions on January Performance	March 15th
CLEC and other interested parties Files Reply to Verizon Exceptions	April 1st
Department Issues Ruling on Exceptions	April 15th
February Performance Reports	March 25th
March Performance Reports	April 25th
Credits Processed for January Performance	By May 1st